

CLAIMS

The invention claimed is:

1. A method for processing and printing electronic images on a
5 medium comprising the steps of:

a) receiving an electronic image file;
b) associating identification information with the electronic image
file;

c) generating a composite image file, wherein the composite image
10 file includes the electronic image file and the identification information;

d) printing the composite image from the composite image file on a
medium, the composite image including an image and a first symbol, the first
symbol including the identification information;

e) extracting the identification information from the first symbol;
15 and

f) printing the identification information read from the first symbol
on the medium.

2. The method of claim 1 wherein the medium is a continuous roll of
20 photographic paper.

3. The method of claim 1 wherein the identification information
includes an order number and an image number.

25 4. The method of claim 3 wherein the identification information is
used to retrieve annotation information, the annotation information then being
printed on the medium.

5. The method of claim 1 wherein the identification information includes annotation information.

6. The method of claim 1 wherein the first symbol is an optically
5 readable barcode.

7. The method of claim 1 wherein the printed identification information includes a second symbol.

10 8. The method of claim 1 wherein the step of printing the composite image includes exposing the medium and chemically developing the image.

9. The method of claim 8 wherein the step of printing the second symbol occurs after the medium has been chemically processed.

15 10. The method of claim 1 wherein the composite image is printed on a photosensitive surface of the medium and the identification information is printed on the image reverse.

20 11. The method of claim 1 wherein the first symbol is read with an optical scanner.

12. The method of claim 1 further comprising the step of assembling an order, wherein the step of assembling an order includes the steps of:

25 separating the first symbol from the medium for the composite image;

separating the image from the medium;

collecting one or more images having associated identification information; and

shipping the collected images to an address associated with the customer number.

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13. A method for processing and printing electronic images on a medium comprising the steps of:

- a) receiving an electronic image file;
- b) associating identification information with the electronic image file;
- c) generating a composite image file, wherein the composite image file includes the electronic image file and the identification information;
- d) printing the composite image from the composite image file on a medium, the composite image including an image and a first symbol, the first symbol including the identification information;
- e) extracting the identification information from the first symbol;
- f) printing the identification information read from the first symbol on the medium; and
- g) separating the first symbol from the medium for the composite image.

14. The method of claim 13 wherein the medium is a continuous roll of photographic paper.

15. The method of claim 13 wherein the identification information includes an order number and an image number.

16. The method of claim 15 wherein the identification information is used to retrieve annotation information, the annotation then being printed on the medium.

17. The method of claim 13 wherein the identification information includes annotation information.

18. The method of claim 13 wherein the first symbol is an optically readable barcode.

19. The method of claim 13 wherein the printed identification
5 information includes a second symbol.

20. The method of claim 13 wherein the step of printing the
composite image includes exposing the medium and chemically developing
the image.

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21. The method of claim 13 wherein the step of printing the second
symbol occurs after the medium has been chemically processed.

22. The method of claim 13 wherein the composite image is printed
15 on a photosensitive surface of the medium and the identification information is
printed on the image reverse.

23. The method of claim 13 wherein the first symbol is read with an
optical scanner.

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24. The method of claim 13 further comprising the step of assembling
an order, wherein the step of assembling an order includes the steps of:

collecting one or more images having associated identification
information; and

25 shipping the collected images to an address associated with the customer
number.

25. An annotation printer apparatus for processing images on a medium and printing information thereon comprising:

a) means for reading a plurality of first symbols existing on the medium, wherein each of the first symbols corresponds to one of a plurality of images existing on the medium, the first symbol including identification information;

b) means for printing identification information read from each of the first symbols, wherein the identification information read from each of the first symbols is printed proximate to the image and first symbol to which it corresponds; and

c) means for regulating movement of the medium through the apparatus to coordinate the reading of each first symbol and the printing of each second symbol.

26. The apparatus of claim 25 wherein the medium is a continuous roll of photographic paper.

27. The apparatus of claim 25 wherein the identification information includes an order number and a customer number.

28. The apparatus of claim 25 wherein the identification information includes annotation information.

29. The apparatus of claim 25 wherein each first symbol is an optically readable barcode.

30. The apparatus of claim 25 wherein the printed identification information includes a second symbol.

31. The apparatus of claim 25 wherein the means for reading the plurality of first barcodes is an optical scanner.

32. The apparatus of claim 25 wherein the means for printing the
5 information is an ink jet print-head.

33. The apparatus of claim 25 wherein the means for regulating the movement of the medium through the apparatus includes a computer, wherein the computer is connected to sensors for sensing the speed the medium moves
10 through the apparatus, for determining when the printing means prints the information so that the information is printed proximate to the corresponding image.

34. The apparatus of claim 33 wherein the means for regulating the
15 movement of the medium through the apparatus further comprises:

an electric motor with an attached drive pulley, the speed of which is regulated by the computer based on the sensed speed of the medium, for motivating the medium; and

a drive system including a plurality of pulleys, wherein a separate pulley
20 is attached to the motor, a supply spool, a take-up spool, and two capstans, the pulleys driven by a plurality of belts attached to the drive pulley of the motor.

35. The apparatus of claim 33 wherein the computer is adapted to communicate with a server computer via a network, for retrieving an
25 annotation associated with the identification information read from the first bar code, the computer further adapted to cause the printing means to print the annotation on the medium proximate to the composite image to which is corresponds.

36. An annotation printer apparatus for processing images on a medium and printing information thereon comprising:

a) means for reading a plurality of first symbols existing on the medium, wherein each of the first symbols corresponds to one of a plurality of images existing on the medium, wherein the means for reading is rigidly attached to a table;

b) means for printing identification information on the medium, the means for printing being rigidly attached to the table, wherein the identification information is printed on the reverse of the image and first symbol to which it corresponds,

c) means for regulating movement of the medium through the apparatus to coordinate the reading of each first symbol and the printing of each second symbol, wherein the means for regulating includes

i) a computer, the being computer connected to sensors rigidly attached to the table, for sensing the speed the medium moves through the apparatus to determine when the printing means prints the information so that the information is printed proximate to the image to which it corresponds,

ii) an electric motor having an output shaft, the speed of the output shaft being regulated by the computer based on the sensed speed of the medium, for motivating the medium, and

iii) a drive system means adapted to transfer rotational motion of the output shaft to a supply spool, a take-up spool, and two capstans simultaneously; and

wherein the computer is configured to communicate with a server computer to receive identification information therefrom, the identification information corresponding to information read from each of the first symbols.

37. The apparatus of claim 36 wherein the medium is a continuous roll of photographic paper.

38. The apparatus of claim 36 wherein the information includes an order number and a customer number.

5 39. The apparatus of claim 36 wherein the information includes annotation information.

40. The apparatus of claim 36 wherein each first symbol is an optically readable barcode.

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41. The apparatus of claim 36 wherein the information includes a second symbol.

15 42. The apparatus of claim 36 wherein the means for reading the plurality of first barcodes is an optical scanner.

43. The apparatus of claim 36 wherein the means for printing the identification information is an ink jet print-head.

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44. A photo-shop for processing and printing digital images comprising:

a) a computer server for generating a user interface, receiving digital images and corresponding information, creating and maintaining customer accounts, authenticating users and generating and sending a composite image to a printer for printing photographic images;

b) a photographic printer for printing photographic composite images on a medium;

c) an annotation printer apparatus including
i) means for reading a plurality of first symbols existing on the medium, wherein each of the first symbols corresponds to one of a plurality of images existing on the medium, wherein the means for reading is rigidly attached to a table;

ii) means for printing identification information on the medium, the means for printing being rigidly attached to the table, wherein the identification information is printed on the reverse of the image and first symbol to which it corresponds;

iii) means for regulating movement of the medium through the apparatus to coordinate the reading of each first symbol and the printing of each second symbol, wherein the means for regulating movement includes;

aa) a computer, the computer being connected to sensors rigidly attached to the table, for sensing the speed the medium moves through the apparatus to determine when the printing means prints the information so that the information is printed proximate to the image to which it corresponds,

bb) an electric motor having an output shaft, the speed of the output shaft being regulated by the computer based on the sensed speed of the medium, for motivating the medium, and

cc) a drive system means adapted to transfer rotational motion of the output shaft to a supply spool, a take-up spool, and two capstans simultaneously;

wherein the computer is configured to communicate with a server
5 computer to receive identification information therefrom, the identification information corresponding to information read from each of the first symbols;

d) a cutter workstation for cutting the medium to separate each first barcode from its corresponding image; and

e) an order assembly workstation for assembling all cut images
10 corresponding to a particular order number.

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